

SEMICONDUCTOR LASER AND METHOD OF PRODUCTION THEREOF

ABSTRACT OF THE DISCLOSURE

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A window structure type AlGaInP semiconductor laser able to suppress abnormal growth in the vicinity of a ridge and having good surface morphology, wherein a least one step-like structure is provided on a substrate having a surface tilted to a [0-1-1] direction from a (100) plane, a semiconductor stack is formed on the substrate and comprises an active layer including two types of Group III elements including at least indium (In) and Group V elements including phosphorus (P), a cladding layer of a first conductivity, a cladding layer of a second conductivity, end surfaces of an active layer serve as end surfaces of a resonator, a light guide is formed between and the end surfaces of the resonator, and the light guide is arranged at an upper step side of the step-like structure so that a portion of the light guide not including resonator end surfaces is positioned in the vicinity of the step-like structure and so that the resonator end surface portions of the light guide are farther from the step-like structure, and a method of production thereof.